

AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A method of data transmission comprising the steps of:
~~dividing at least a portion of the data packet into a first plurality of data sub-packets;~~
~~associating a first control information with the first plurality of data sub-packets;~~
~~transmitting at the first control information associated with one of the first plurality of data sub-packets repeatedly over at a plurality of time slots of a control channel; and~~
~~transmitting the associated one of the first plurality of data sub-packets over a plurality of time slots of a data channel, the data channel being parallel to the control channel.~~
2. (Currently Amended) The method of claim 1, wherein the first control information indicates a manner of decoding the associated ~~first~~~~one of the~~ plurality of data sub-packets.
3. (Currently Amended) The method of claim 1 comprising the additional step of:
channel coding the data packet prior to the step of dividing the data packet into the ~~first~~ plurality of data sub-packets.
4. (Currently Amended) The method of claim 1 comprising the additional step of:
channel coding ~~at least one of the associated~~ ~~one of the~~~~first~~ plurality of data sub-packets prior to the step of transmitting the ~~at least one of the associated~~ ~~one of the~~~~first~~ plurality of data sub-packets.

5. (Currently Amended) The method of claim 1, wherein the plurality of time ~~slot~~~~slot x~~ of the control channel and the plurality of time ~~slot~~~~slot y~~ of the data channel are time synchronized to each other.

6. (Cancelled)

7. (Currently Amended) The method of claim 1, wherein the plurality of time ~~slot~~~~slot x~~ of the control channel and the plurality of time ~~slot~~~~slot u~~ of the data channel are not time synchronized to each other and the first control information includes an indication of the ~~associated~~~~associate one of the~~first plurality of data sub-packets.

8. (Currently Amended) The method of claim 1, wherein the dividing step also includes dividing at least a portion of the data packet into a second plurality of data sub-packets, and further comprising the additional step of:

associating a second control information with the second plurality of data sub-packets;
transmitting a~~the~~ second control information associated with a~~the~~ second of the~~the~~ plurality of data sub-packets over a time ~~slot~~~~slot x+1~~ of the control channel; and
transmitting the associated second of the~~the~~ plurality of data sub-packets over a~~second~~ respective time ~~slot~~~~slot y+1~~ of the data channel.

9. (Original) The method of claim 8, wherein the first and second control information are identical.

10. (Currently Amended) The method of claim 8, wherein the second control information indicates a manner of decoding the associated second of the plurality of data sub-packets.

11. (Currently Amended) The method of claim 1 comprising the additional step of: transmitting the first control information over a plurality of time slotsslot p of another control channel.

12. (Currently Amended) The method of claim 11, wherein the plurality of time slotsslot x of the control channel and the plurality of time slotsslot p of the another control channel are time synchronized to each other.

13. (Currently Amended) The method of claim 1, wherein the first control information includes a new/continuation flag to indicate whether one of the associated one of thefirst plurality of data sub-packets is a beginning of a new data packet transmission or a continuation of a data packet transmission in progress.

14. (Currently Amended) The method of claim 1, wherein the first control information includes a sequence identifier to indicate a sequence of one of the associated one of thefirst plurality of data sub-packets.

15. (Currently Amended) The method of claim 1, wherein the first control information includes a user identifier to indicate a user to whom one of the associated firstone of the plurality of data sub-packets is intended.

16. (Original) The method of claim 1, wherein the first control information is channel coded prior transmission.

17. (Currently Amended) The method of claim 1 comprising the additional step of: transmitting user specific flags over a time slot-~~q~~ of a user identity channel to indicate one or more users to whom one of the associated ~~one of the~~first plurality of data sub-packets is intended.

18. (Currently Amended) The method of claim 1, wherein user specific flags associated with users to whom ~~the~~one of the associated first plurality of data sub-packets are intended are set to one and user specific flags associated with users to whom the one of the first plurality of data sub-packets are not intended are set to zero.

19. (Currently Amended) The method of claim 1, wherein the user specific flags associated with users to whom one of the associated ~~one of the~~first plurality of data sub-packets are intended are turned on or set to one and transmitted when the associated one of the plurality of data sub-packets is a first data sub-packet or a last sub-packet of the data packet.

20. (Currently Amended) The method of claim 19, wherein the user specific flag is an in-phase signal when one of the associated ~~one of the~~first plurality of data sub-packets is the first data sub-packet and a quadrature signal when one of the associated ~~one of the~~first plurality of data sub-packets ~~is~~ the last sub-packet of data packet.

21. (Original) The method of claim 1, wherein the control channel is power controlled.

22. (Original) The method of claim 21 comprising the additional step of: receiving control channel quality feedback from a receiver to which the data packet is intended.

23. (Currently Amended) A transmitter comprising of:
means for dividing ~~a~~at least a portion of a data packet into a first plurality of data sub-packets;

means for transmitting a first control information associated with ~~one~~of the first plurality of data sub-packets repeatedly over a plurality of time slot~~s~~slot ~~x~~x of a control channel; and
means for transmitting the associated ~~one~~of the first plurality of data sub-packets over a plurality of time slot~~s~~slot ~~y~~y of a data channel, the data channel being parallel to the control channel.

24. (Currently Amended) The transmitter of claim ~~22~~23 further comprising of:
means for channel coding the data packet or the first plurality of data sub-packets.

25. (Currently Amended) The transmitter of claim ~~22~~23 further comprising of:
means for transmitting a second control information associated with a second ~~of the~~ plurality of data sub-packets over a second plurality of time slot~~s~~slot ~~x+1~~x+1 of the control channel;
and

means for transmitting the associated second ~~of the~~ plurality of data sub-packets over a second plurality of time slot~~s~~slot ~~y+1~~y+1 of the data channel;
the data channels being separate from the control channel.

26. (Original) The transmitter of claim 25, wherein the first and second control information are identical.

27. (Currently Amended) The transmitter of claim 23 further comprising of:
means for transmitting a new/continuation flag in a time slot q of a new/continue channel to indicate whether one of the associated one of thefirst plurality of data sub-packets is a beginning of a new data packet transmission or a continuation of a data packet transmission in progress.

28. (Currently Amended) The transmitter of claim 23 further comprising of:
means for transmitting a sequence identifier in a time slot q of a communication channel parallel to the data or control channel to indicate a sequence of one of the associated one of thefirst plurality of data sub-packets.

29. (Currently Amended) The transmitter of claim 2223 further comprising of:
means for channel coding the first control information.

30. (Currently Amended) The transmitter of claim 2223 further comprising of:
means for transmitting user specific flags over a time slot q of a user identity channel to indicate one or more users to whom one of the associated one of thefirst plurality of data sub-packets is intended.

31. (Currently Amended) The transmitter of claim 2223, wherein the transmitter is a base station belonging to a wireless communication system.

32. (Currently Amended) The transmitter of claim 2223 further comprising of:

means of adjusting a power at which the means transmits the first control information over the control channel.

33. (Original) The transmitter of claim 32 further comprising of:
means for receiving control channel quality feedback.

34. (Previously Presented) A method of data transmission comprising the steps of:
dividing a data packet into a plurality of data sub-packets;
transmitting a first control information associated with one of the plurality of data sub-packets over at time slot x of a control channel;
transmitting the associated one of the plurality of data sub-packets over a time slot y of a data channel;
wherein user specific flags associated with users to whom the associated one of the plurality of data sub-packets are intended are turned on or set to one and transmitted when the associated one of the plurality of data sub-packets is a first data sub-packet or a last sub-packet of the data packet; and
wherein the user specific flag is an in-phase signal when the associated one of the plurality of data sub-packets is the first data sub-packet and a quadrature signal when the associated one of the plurality of data sub-packets is the last sub-packet of data packet.